

Center & Spread Worksheet

Worksheet answers:

1) (a) mean = 417.31 Med = 414 IQR = 15.5 s = 20.83

(b) Mean approx. equal to Med --> roughly symmetric

(c) $A = 405 - (1.5 \times 15.5) = 381.75$
 $B = 420.5 + (1.5 \times 15.5) = 443.25$

Yes, 2 outliers at 457 & 461



2) Mean = increase
 Median = approx same
 std. dev = increase

3) (a) mean = \$18,000 Med = \$15,500

(b) They are so different because the high salary of \$39,000 pulls the mean up (poss. outlier)

(c) Median, because of the outlier (\$39,000)

(d) s = \$11,153.47

	Class 1	Class 2
mean =	79.167	78.667
std. dev =	13.36	9.18

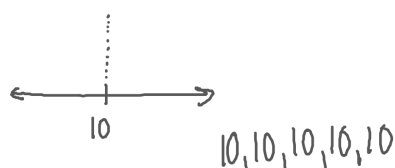
(a) Class 1 had the higher average

(b) Class 2 was more consistent (lower std. dev.)

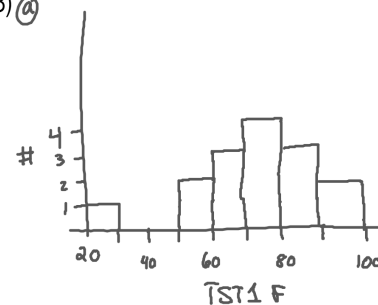
5) (a) roughly symmetric
 (b) left skewed
 (c) right skewed

6) (a) mean & std. dev. & range
 (b) median & IQR & range
 (c) median & IQR & range

7) ANY SET WHERE ALL NUMBERS ARE THE SAME

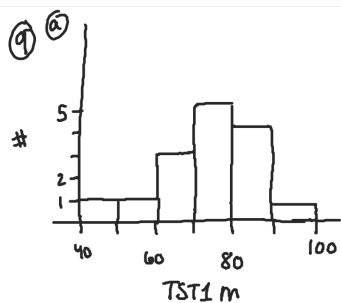


8) a)



© Symmetric
 Unimodal
 Outlier @ 20%.
 Median of 76%.
 IQR of 21%.
 Range (20, 92) %.

⑥ mean = 71.07 min = 20 med = 76 n = 15
 s = 18.136 Q₁ = 62 Q₃ = 83 IQR = 21
 max = 92



⑩ left skewed
unimodal
center @ Median of
76%
IQR = 14%
range (45, 90)%

⑪ mean = 73.47 min = 45
s = 11.94 $Q_1 = 68$
Med = 76

$Q_3 = 82$
Max = 90